

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A process of preparing cells for cell therapy, comprising the steps of:

inducing helper T1 cells that have a nonspecific antitumor activity isolated from leukocytes isolated from a patient; and

imparting antigen specificity to the helper T1 cells,
wherein the step of imparting antigen specificity to the helper T1 cells comprises transducing the helper T1 cells with a MHC class I-restricted T cell receptor gene that recognizes a cancer-associated antigen, and wherein the helper T1 cells are activated or proliferated.

2-4. (Cancelled).

5. (Previously Presented) The process for preparing cells for cell therapy according to claim 1, wherein the cancer-associated antigen is selected from the group consisting of Wilms' Tumor 1, CEA, AFP, CA19-9, CA125, PSA, CA72-4, SCC, MK-1, MUC-1, p53, HER2, G250, gp-100, MAGE, BAGE, SART, MART, MYCN, BCR-ABL, TRP, LAGE, GAGE, and NY-ESO1.

6. (Withdrawn) The process for preparing cells for cell therapy according to claim 1, wherein the step of inducing helper T1 cells having a nonspecific antitumor activity is carried out by culturing a T cell-containing material in the presence of anti-CD3 antibody and IL-2.

7. (Currently Amended) The process for preparing cells for cell therapy according to claims 1 or [[6]], 5, further comprising a step of purifying the helper T1 cells to which antigen specificity has been imparted.

8. (Previously Presented) The process for preparing cells for cell therapy according to claim 7, wherein the step of purifying the helper T1 cells to which antigen specificity has been imparted is carried out by using antibody-bearing magnetic beads.

9. (Previously Presented) A process of preparing cells for cell therapy, comprising the steps of:

inducing helper T1 cells and cytotoxic T1 cells that have a nonspecific antitumor activity isolated from leukocytes isolated from a patient; and

imparting antigen specificity to the helper T1 cells and cytotoxic T1 cells wherein the step of imparting antigen specificity to the helper T1 cells and cytotoxic T1 cells comprises transducing the helper T1 cells and the cytotoxic T1 cells with a MHC class I-restricted T cell receptor gene that recognizes a cancer-associated antigen, and wherein the helper T1 cells are activated or proliferated.

10-12. (Cancelled)

13. (Previously Presented) The process for preparing cells for cell therapy according to claim 9, wherein the cancer-associated antigen is selected from the group consisting of Wilms' Tumor 1, CEA, AFP, CA19-9, CA125, PSA, CA72-4, SCC, MK-1, MUC-1, p53, HER2, G250, gp-100, MAGE, BAGE, SART, MART, MYCN, BCR-ABL, TRP, LAGE, GAGE, and NY-ESO1.

14. (Withdrawn) The process for preparing cells for cell therapy according to claim 9, wherein the step of inducing helper T1 cells and cytotoxic T1 cells having a nonspecific antitumor activity is carried out by culturing a T cell-containing material in the presence of anti-CD3 antibody, IL-2, and IL-12.

15. (Currently Amended) The process for preparing cells for cell therapy according to claims 9 or 14, further comprising a step of separating the helper T1 cells and cytotoxic T1 cells to which antigen specificity has been imparted.

16. (Previously Presented) The process for preparing cells for cell therapy according to claim 15, wherein the process of separating the helper T1 cells and cytotoxic T1 cells to which antigen specificity has been imparted is carried out by using antibody-bearing magnetic beads.

17. (Previously Presented) The process for preparing cells for cell therapy according to claim 15, further comprising a step of mixing the separated helper T1 cells and cytotoxic T1 cells in any given proportion.

18. (Withdrawn) Cells for cell therapy, that are produced by a process comprising the steps of:

inducing helper T1 cells that have a nonspecific antitumor activity from leukocytes isolated from a patient; and

imparting antigen specificity to the helper T1 cells, wherein the step of imparting antigen specificity to the helper T1 cells comprises transducing the helper T1 cells with a T cell receptor gene that recognizes a cancer-associated antigen.

19. (Withdrawn) Cells for cell therapy, that are produced by a process comprising the steps of:

inducing helper T1 cells and cytotoxic T1 cells that have a nonspecific antitumor activity from leukocytes isolated from a patient; and

imparting antigen specificity to the helper T1 cells and cytotoxic T1 cells, wherein the step of imparting antigen specificity to the helper T1 cells and cytotoxic T1 cells comprises transducing the helper T1 cells and the cytotoxic T1 cells with a T cell receptor gene that recognizes a cancer-associated antigen.

20. (Withdrawn) A method for preventing or treating tumor, comprising the steps of: isolating leukocytes from a patient;

inducing from the leukocytes helper T1 cells that have a nonspecific antitumor activity;

imparting antigen specificity to the helper T1 cells, wherein the step of imparting antigen specificity to the helper T1 cells comprises transducing the helper T1 cells with a T cell receptor gene that recognizes a cancer-associated antigen; and

administering to the patient the helper T1 cells to which antigen specificity has been imparted.

21. (Withdrawn) A method for preventing or treating tumor, comprising the steps of:

isolating leukocytes from a patient;
inducing from the leukocytes helper T1 cells and cytotoxic T1 cells that have a nonspecific antitumor activity;
impairing antigen specificity to the helper T1 cells and cytotoxic T1 cells, wherein the step of impairing antigen specificity to the helper T1 cells and cytotoxic T1 cells comprises transducing the helper T1 cells and the cytotoxic T1 cells with a T cell receptor gene that recognizes a cancer-associated antigen; and
administering to the patient the helper T1 cells and cytotoxic T1 cells to which antigen specificity has been imparted.

22. (Previously Presented) The method of claim 1, wherein the T cell receptor gene is isolated from a tumor specific human cytotoxic T cell clone.